

SEPARATION OF SUGARS DERIVED FROM A BIOMASS

ABSTRACT

By providing a biomass and an aqueous acidic solution to a hydrolysis vessel, hydrolysis within the hydrolysis vessel, forms sugars. The aqueous acidic solution, containing sugars, is withdrawn from the hydrolysis vessel and transferred to a phase forming vessel to form two phases; a sugar phase and an aqueous acidic solution phase. The sugar phase, upon withdrawing from the phase forming vessel, is subjected to additional processing outside the hydrolysis vessel. Residue, containing lignins remaining from the biomass, is withdrawn from the hydrolysis vessel and subjected to filtration resulting in a filtrate for recycle to the hydrolysis vessel and filtered residue for subsequent processing. Thereby, sugars are derived from a biomass, and residue, remaining from the biomass, is withdrawn from the hydrolysis vessel.